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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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~~09/692,312~~

~~06/23/2000~~

Selim Shlomo Rakib

TER-012

9096

7590

04/07/2004

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EXAMINER

SHANG, ANNAN Q

ART UNIT

PAPER NUMBER

2614

12

DATE MAILED: 04/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/065,635

Applicant(s)

MOREJON ET AL.

Examiner

KHAI TRAN

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24-29, 53-58 is/are allowed.
- 6) ☒ Claim(s) 1-4, 12, 13, 17-19, 30-33, 41, 42 and 46-48 is/are rejected.
- 7) ☒ Claim(s) 5-11, 14-16, 20-23, 34-40, 43-45, 49-50 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The request for reconsideration filed 1/26/04 has been entered. Claims 1-58 are pending in this Office action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1-4, 12-13, 17-19, 30-33, 41-42, 46, 47-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pollet et al (U.S. 2002/0150071 A1) in view of Kato et al (U.S. 2002/0105973 A1).

Regarding claims 1-4, Pollet et al disclose an improved initialization method for a communication system comprising the steps of: estimating a timing offset utilizing correlation with an entire received DTM frame comprising a plurality of DMT frames (col. 1, [0004]). Pollet et al fail to disclose utilizing correlation for performing estimating a timing correlation.

Kato et al disclose that frames can be slightly misaligned as result of timing offset; wherein a frame can be extracted from the received signal (col. 2, [0026] to col. 3, [0027]). It would have been obvious to one having ordinary skill in the art at the time

the invention was made to receive a timing offset by correlating the received frame such as DMT frame as taught by Kato et al into the teachings of Pollet et al in order to hence a great chance at establishing synchronization.

Pollet et al also disclose a step of estimating a channel impulse response utilizing at least one pilot tone, wherein the received DMT frame further comprises that a least one pilot tone col. 1, [0008].

Regarding claims 12-13, Pollet et al disclose a method of estimating timing offset comprising the steps of: receiving an entire DTM frame comprising a plurality of DMT frames; and utilizing the entire received DMT frame to estimate offset through correlation (col. 1, [0004]).

Claims 17-19 are similar to claims 1-4. Therefore, claims 17-19 are rejected under a similar rationale.

Claims 30-33 are similar to claims 1-4. Therefore, claims 30-33 are rejected under a similar rationale.

Claim 41 is similar to claim 1. Therefore, claim 41 is rejected under a similar rationale.

Claim 42 is similar to claim 3. Therefore, claim 42 is rejected under a similar rationale.

Claim 46 is similar to claim 17. Therefore, claim 46 is rejected under a similar rationale.

Claims 47-48 are similar to claims 3-4. Therefore, claims 47-48 are rejected under a similar rationale.

Allowable Subject Matter

4. Claims 24-28, 29, 53-57, and 58 are allowed.
5. Claims 5-11, 14-16, 20-23, 34-40, 43-45, 49-52 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAI TRAN whose telephone number is (703) 305-1876. The examiner can normally be reached on 7:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammed Ghayour can be reached on (703) 306-3034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2631

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


KHAI TRAN
PATENT EXAMINER

KT
April 5, 2004